400 Meter Training

Presented by: Erik A. Jenkins
Head Track & Field/XC Coach
Western Kentucky University (WKU)
You don’t take donkeys to the Kentucky Derby!

...
Keys to Success for Seeking and Developing Speed

- Recruit speed from everywhere.
- Be excited about the opportunity to nurture talent.
- Present a winning attitude.
  - Be a efficient communicator
  - Willingness to learn
  - Every student athlete (SA) is different
- Stick to your guns and don’t change with the wind.
  - Know your environment, SA, and yourself
Considerations for Training

- Type of Athlete
- Level of Physical and Mental Maturation
- Resources Available
  - Strength Staff, Medical Staff, Supplementation
- Facilities
- Environment
- Expectations
The 400: An Endurance Race or a Sprint?

- A sprint that maximizes the individual’s endurance capabilities.

- Embrace two types of runners:
  - Speed
  - Endurance
Common Types of Training

- Tempo based training
  - heavy volume and varied intensities
- Anaerobic speed power based training
400 Race Model

- $1^{\text{st}}$ 200 m = 200m PR (avg. top 5) + 1.5 sec.

- $2^{\text{nd}}$ 200 m = $1^{\text{st}}$ 200m + 2.0 sec.

Example 1

- 21.3 + 1.5 = 22.8 ($1^{\text{st}}$ 200)
- 22.8 + 2.0 = 24.8 ($2^{\text{nd}}$ 200)
- 22.8 ($1^{\text{st}}$ 200) + 24.8 ($2^{\text{nd}}$ 200) = 47.6 (Est. 400)
### Pace per 100 Meter Training Chart

**Pace Per 100 meter training chart**

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<tr>
<th>400 goal</th>
<th>avg. mps</th>
<th>70%</th>
<th>75%</th>
<th>80%</th>
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Race Strategy

- Push
- Drive
- Roll
- Ride Out!!!!
Types of 400 Workouts

Derived from Clyde Hart:

A. Speed Endurance:
   1. Runner incurs a high oxygen debt.
   2. Runs distances of 100-600 meters. Total distance is 2 ½ times racing distance.
   3. Rest 5-10 minutes.

B. Tempo Endurance:
   1. Doing the run slower helps runner learn tempo and rhythm.
   2. Emphasis is on quantity, not quality.
   3. Rest will be short.
Types of 400 Workouts Cont.

Derived from Clyde Hart:

C. Strength endurance:
   - Activities that last longer than 10 seconds in duration with some type of resistance running – long hills, or stadium steps.

D. Endurance running:
   - Pure aerobic running: runs of 15-45 minutes.

E. Power Speed:
   - Speed of muscle contraction is emphasized: fewer than 10 seconds in duration.

F. Event running:
   - Runs that teach runner how the 400 should be run.

G. Speed:
   - Full speed runs of 30 to 150 meters. Rest is usually long.

H. Strength:
   - General and specific strength development, traditional weightlifting, Polymeric used as needed
Off the Oval

- Fall lifting is on a four day rotation (Monday, Tuesday, Thursday, Friday)
- Spring lifting is on a three day rotation (Sunday, Tuesday, Thursday)
- Ice tank is done after every lift
- Stretch and hydrate following every workout
Fall Training/Off Season (Sep)

- **Monday**: timed efforts for distance on the field
- **Tuesday**: strides on the field (100 m)
- **Wednesday**: (rest/study/rehab)
- **Thursday**: timed run around campus and then sprints on field
- **Friday**: timed run around campus (1.5 – 2 miles)
- **Saturday and Sunday**: rest
Pre Season (Oct)

- **Monday**: timed efforts for distance on the field
- **Tuesday**: strides on the field; 10-20 x 100 with jog back
- **Wednesday**: (rest/study/rehab)
- **Thursday**: timed run around campus and then sprints on field; 10-14 x 100
- **Friday**: 8 minute jog, 14-18 Hills @ 100-150 meters
- **Saturday and Sunday**: rest
Pre Season (Nov)

- **Monday**: accelerations (Stick Drills)
- **Tuesday**:
  - 10x 50, 100, 150, 600, 300, 150, 100
  - 4x100, 150, 150, 300, 600, 4x100
- **Wednesday**: (rest/study/rehab)
- **Thursday**:
  - 4 x 150, 100, 50
  - 6 - 9 x 150
- **Friday**: accelerations, block starts, relay work
- **Saturday and Sunday**: rest
Competition/Indoor

- **Sunday**: warm up, 600-800 meters technical sprints, weights
- **Monday**: rest, study, rehab
- **Tuesday**: 6-8 x 150
- **Wednesday**: block starts, 150, 100, 50
- **Thursday**: accelerations, relay work, 6 x 50
- **Friday**: travel, warm up
- **Saturday**: competition
Competition/Outdoor

- **Sunday**: warm up, 600-800 meters technical sprints, weights
- **Monday**: rest, study, rehab
- **Tuesday**: relay work, 3 x 150
- **Wednesday**: 4 x 100 (with baton), 600 or 500, 150,100,50
- **Thursday**: 4 x 50 (3pt.) block starts, relay work
- **Friday**: travel, warm up
- **Saturday**: competition
Conclusion

- Know yourself and understand your athlete.
- Be confident in the training system and plan you design. Don’t be afraid innovate as the athlete matures.
- Clearly communicate the desired race model and practice how to execute it efficiently.